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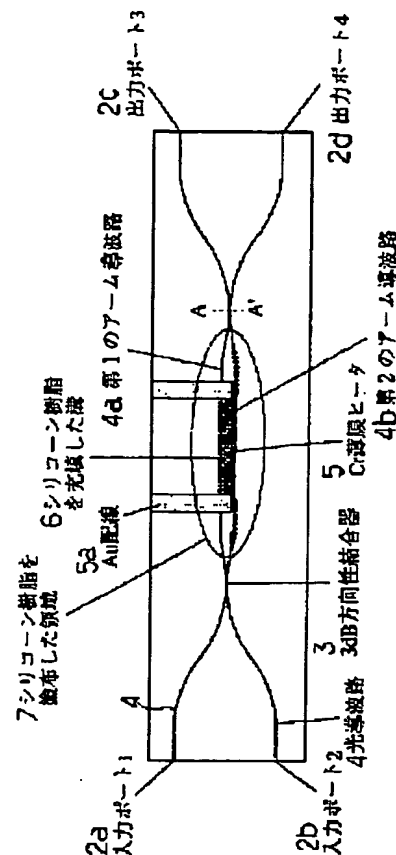
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TITLE : THERMOOPTICAL SWITCH



ABSTRACT : PROBLEM TO BE SOLVED: To save power of a waveguide type optical switch.

SOLUTION: The thermo-optical switch of a Mach-Zehnder type consists of two directional couplers 3 formed by bringing two waveguides 4 into proximate to each other on a substrate, two arm waveguides 4a, 4b connecting these directional couplers and a thin-film heater for shifting the phase of propagation light by imparting a thermo-optical effect to these arm optical waveguides. A groove 6 for parting the arm optical waveguides to be imparted with the thermo-optical effect is arranged in at least mid-way of the arm optical waveguides to be imparted with the thermo-optical effect. An org. material having a thermo-optical constant larger than the thermo-optical constant of the arm optical waveguides to be imparted with the thermo-optical effect is filled into this groove.

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